

U.S. Patent Application Serial No. 09/884,998
Response filed February 23, 2005
Reply to OA dated December 1, 2004

REMARKS

Claims 25 and 30 have been amended in order to more particularly point out, and distinctly claim the subject matter to which the applicants regard as their invention. The applicants respectfully submit that no new matter has been added. It is believed that this Response is fully responsive to the Office Action dated December 1, 2004.

Claims 25 - 33 remain in this application, and claims 1 - 24 have been canceled without prejudice or disclaimer.

The following obviousness rejections are set forth in the outstanding Office Action:

(1) claims 25, 26, 28 and 29 stand rejected under 35 USC §103(a) based on Girardello (U.S. Patent No. 6,193,820); and

(2) claims 27 and 30 - 33 stand rejected under 35 USC §103(a) based on Girardello in view of Japanese Patent Publication No. 1-272719.

The applicants respectfully request reconsideration of these rejections.

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At the outset, in the Examiner's last Action (as set forth in the Advisory Action dated July 27, 2004), the Examiner raised the issue that lines 53 - 58, column 2 in Girardello teach a core region that "also contains intermediate cooling structure such as bainite," contrary to the applicants' previous argument that Girardello's core is limited to a "sorbite region."

So as to further distinguish the applicants' claimed crawler belt bushing over the teachings of the cited prior art (including Girardello), the applicants amended independent claim 25 and argued, in line with such amendment, that the claimed crawler belt bushing:

is made of a steel having a carbon content equal to those of medium carbon steels and/or eutectoid steels, which is 0.35 wt% or more.

In response to the above-highlighted claimed structural feature of the applicants' claimed invention over the cited prior art, the Examiner (in the outstanding Office Action dated December 1, 2004) did the following:

(A) the Examiner's arguments (see, the paragraph bridging pages 2 and 3 of the outstanding Action) did not address the claimed crawler belt bushing having steel with a carbon content of 0.35 wt% or more; and

(B) the Examiner's arguments avoid the above-discussed distinguishable claimed structural feature since such arguments are instead directed to the rule regarding product-by-process claim limitation (see, the first full paragraph on page 3 of the outstanding December 1, 2004 Office Action).

First, as noted above, the outstanding Action has not addressed the claimed crawler belt bushing having steel with a carbon content of 0.35 wt% or more. Second, the applicants have amended each of independent claims 25 and 30 in order to positively recite the claimed structural feature of the applicants' claimed crawler belt bushing comprising the claimed steel having a carbon content of 0.35 wt% or more.

Third, the applicants have amended each of independent claims 25 and 30 so as to more particularly recite that the claimed core region has a soft layer, the soft layer being between the inner and outer circumferential surfaces, and the soft layer being composed of either (a) a structure consisting of one of pearlite and bainite or (b) at least two structures selected from the group consisting of ferrite, pearlite, bainite and martensite, which are precipitated during cooling from the quenching temperature.

According to Girardello's Figures 7 and 8, a part having the lowest hardness has a ferrite structure only. Each of claims 25 and 30 has been amended so as to exclude the possibility that the claimed soft layer is composed of ferrite only. As shown in the previously submitted figures (see, Figures 12 and 13, as attached to the September 25, 2003 Preliminary Amendment), the claimed soft layer never contains only ferrite.

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It is respectfully submitted that the secondary reference does not supplement the above-discussed deficiencies or drawbacks of Girardello in failing to fully meet the applicants' claimed invention, as now recited in each of claims 25 and 30 (and the claims respectively dependent therefrom). Accordingly, a person of ordinary skill in the art would not have found the applicants' claimed invention obvious under 35 USC §103(a) based on Girardello, singly or in view of Japanese Patent Publication No. 1-272719.

Accordingly, the withdrawal of the outstanding obviousness rejections under 35 USC §103(a) based on Girardello, singly or in view of Japanese Patent Publication No. 1-272719, is in order, and is therefore respectfully solicited..

In view of the aforementioned amendments and accompanying remarks, claims, as amended, are in condition for allowance, which action, at an early date, is requested.

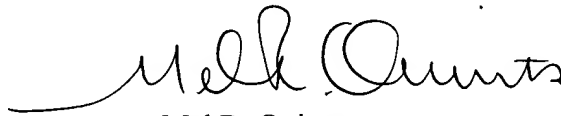
If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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